

PROPOSED FLETC TRAINING CENTER
WETLANDS RARE PLANT SURVEY

LOCATION: Cheltenham, Prince Georges Co., MD

DRAINAGE: Piscataway Creek

GEOLOGY: Upland – Pleistocene Brandywine formation
Lower creeks eroded into Miocene Calvert formation

DESCRIPTION OF WETLANDS: See maps for approximate location and extent of wetlands.

WKS-A: Isolated depression surrounded by scrub pine. Almost all grasses -- *Panicum dicotomiflorum*, *Andropogon virginicus*, *Aristida longispica*- with a few *Juncus effusus* and *Eupatorium hyssopifolium*.

WKS-C: Young maple – sweet gum woods with *Cinna*, stilt grass, *Lycopus virginicus*, *Aster lateriflorus*, and *Carex* spp.

WKS-D: Shaded by a thin canopy of red maple with scattered highbush blueberry. Mostly grass -- *Calamagrostis cinnoides* and *Chasmanthium laxum*, with two mosses – *Sphagnum* sp. and *Polystrichum* type-and scattered *Lycopus virginicus*, *Aster lateriflorus*, and *Osmunda cinnamomea*.

WETLAND B: Stream corridor. Upper part has red maple, sweet gum, and greenbrier. Wider stretches have stilt grass. Middle part, near road crossing, is more open, with some maple, sweet gum, willow, arrowwood viburnum, and alder. Between shrubs is a heavy ground cover of goldenrods, deer tongue grass (*Panicum clandestinum*) and vines -- honeysuckle and grape, with a few *Carex* spp. and *Polygonum* spp. in the stream channel. Lower part has heavy shade of mostly red maple with no shrubs and a carpet of stilt grass and wood reed grass (*Cinna arundinacea*), and a few *Onoclea sensibilis*, *Lycopus virginicus*, *Boehmeria cylindrica*, and *Carex* spp. Near the lower end is a small open patch dominated by *Carex* spp. and *Polygonum* spp.

HF-A & B: A wedge between road and fence. Nearly level young maple – sweet gum woods with greater diversity of both shrubs and herbs, including *Cornus amomum*, *Betula nigra*, *Ilex verticillata*, *Alnus serrulata*, *Scirpus cyperinus*, *Onoclea sensibilis*, *Aster lateriflorus*, *Juncus* spp., *Carex* spp., grass spp., several *Scutellaria lateriflora* and *Lobelia cardinalis*, and a population of *Galium trifidum*. This area has the only good quality forested wetland on the survey area. The tip of the wedge is open, with deer tongue grass and goldenrods.

HF-C: Erosion gully in maple woods with arrowwood viburnum at edge, stilt grass and *Carex* spp.

HF-D: A partly cleared strip along the fence with maple, spicebush, stilt grass, *Cinna*, and *Glyceria striata*.

HF-E: Upper part is open ditch with sweet gum saplings on edge and some *Carex lurida*, *Polygonum punctatum*, *Erechtites hieracifolia*, between heavy patches of deer tongue grass and fescue. The lower part is maple woods with stilt grass and *Cinna*.

RB-A: Isolated bowl in middle of grassy field, with one willow in middle, and remnants of dead Phragmites. Herbaceous species include *Scirpus cyperinus*, *Juncus effusus*, *Eupatorium coelestinum*, *Epilobium coloratum*, and *Aster* spp.

RB-B: Another high-quality wetland with some forested habitat similar to HF_A & B, and also with some opener, usually wet areas carpeted with *Ludwigia palustris*. Other species include *Rosa carolina*, *Cephalanthus occidentalis*, *Callitriche* sp., *Echinocloa muricata*, *Panicum rigidulum*, and *Leersia oryzoides*. Eastward the edges revert to maple – silt grass woods, and there is an alder thicket near the east fence.

RB-?: Eroded stream channel through maple – sweet gum woods.

RARE PLANTS: Two species of concern have been reported from near the site:

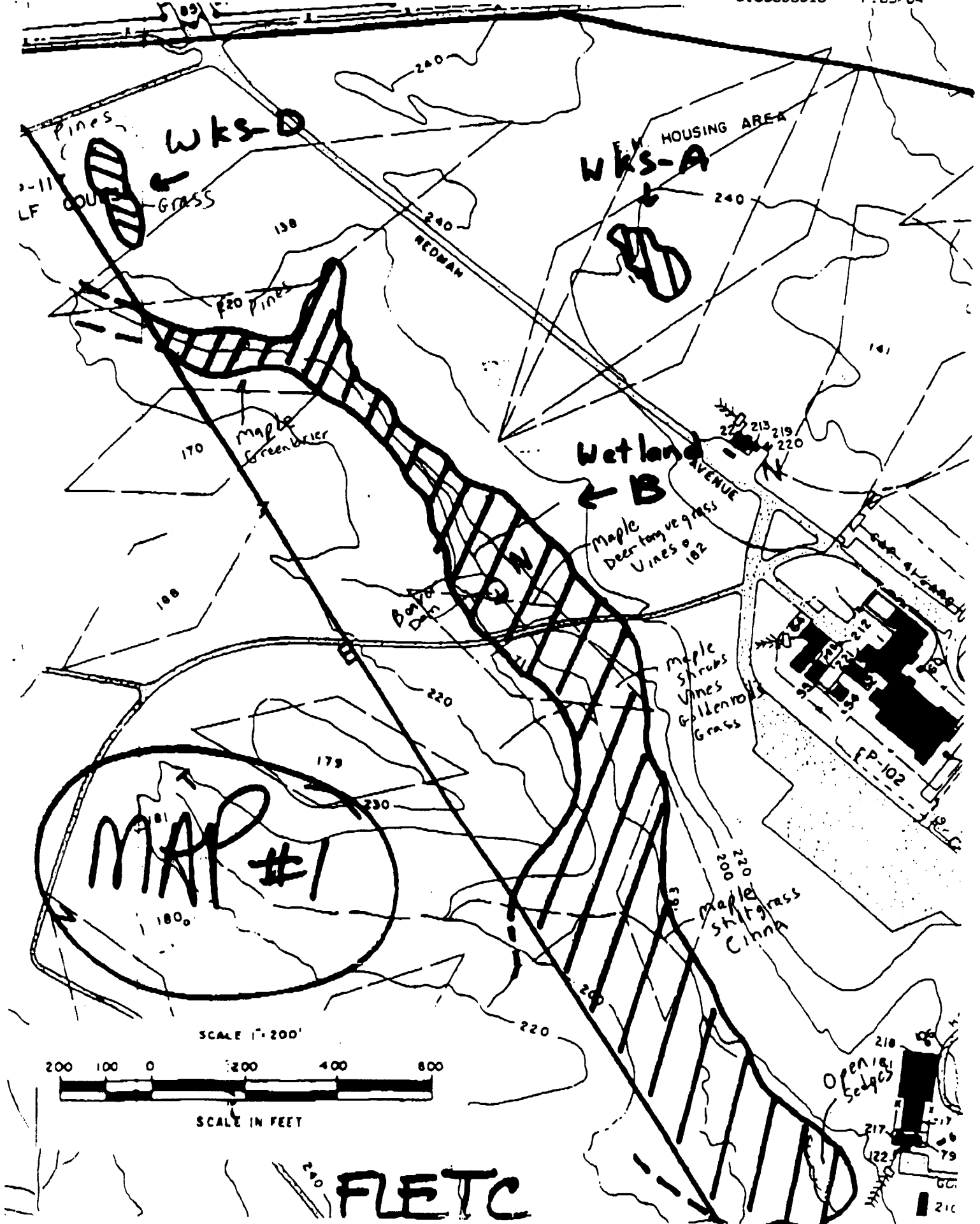
Polygonum densiflorum – Dense-flowered knotweed – Endangered
Galium trifidum – Small bedstraw – Undetermined

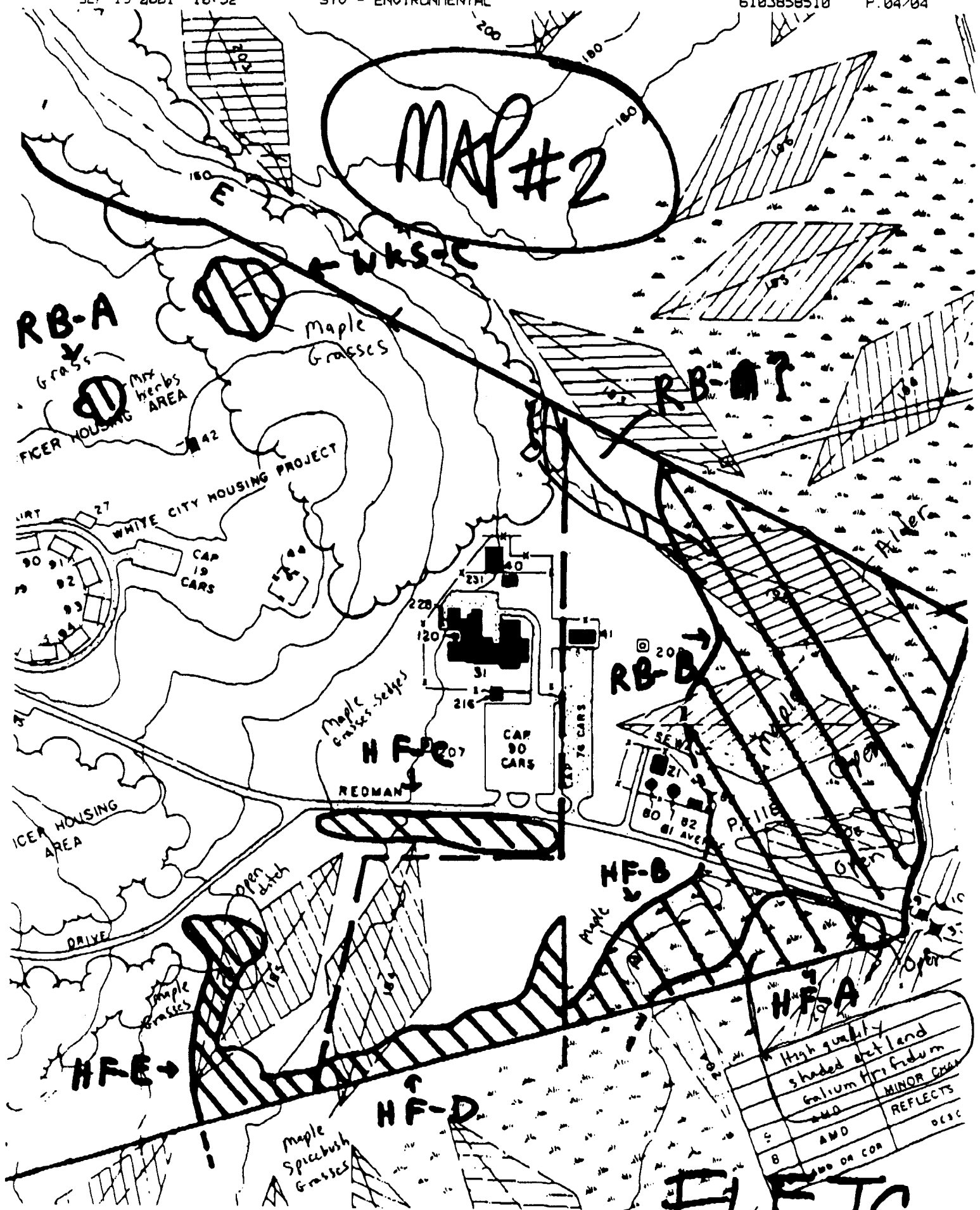
Polygonum densiflorum usually grows in shallow water. There is no good habitat for this species on the site, and no large *Polygonums* were seen.

Galium trifidum is found in moist woods and edges. It is a northern species, at the southern edge of its range in Maryland. A well-established population is growing on the site in the wetlands associated with Piscataway Creek. Plants are scattered in alien-free and not heavily shrubby red maple woods, which is also the area of the highest-quality wetlands on the site.

SURVEYED: 15 October, 2001, approximately 4 hours

Janet Elbert





LINE #2

PROJECT

Galium trifidum
known locations
possible habitat

REDMAN

CAP
80
CARS

CAP 78 CARS

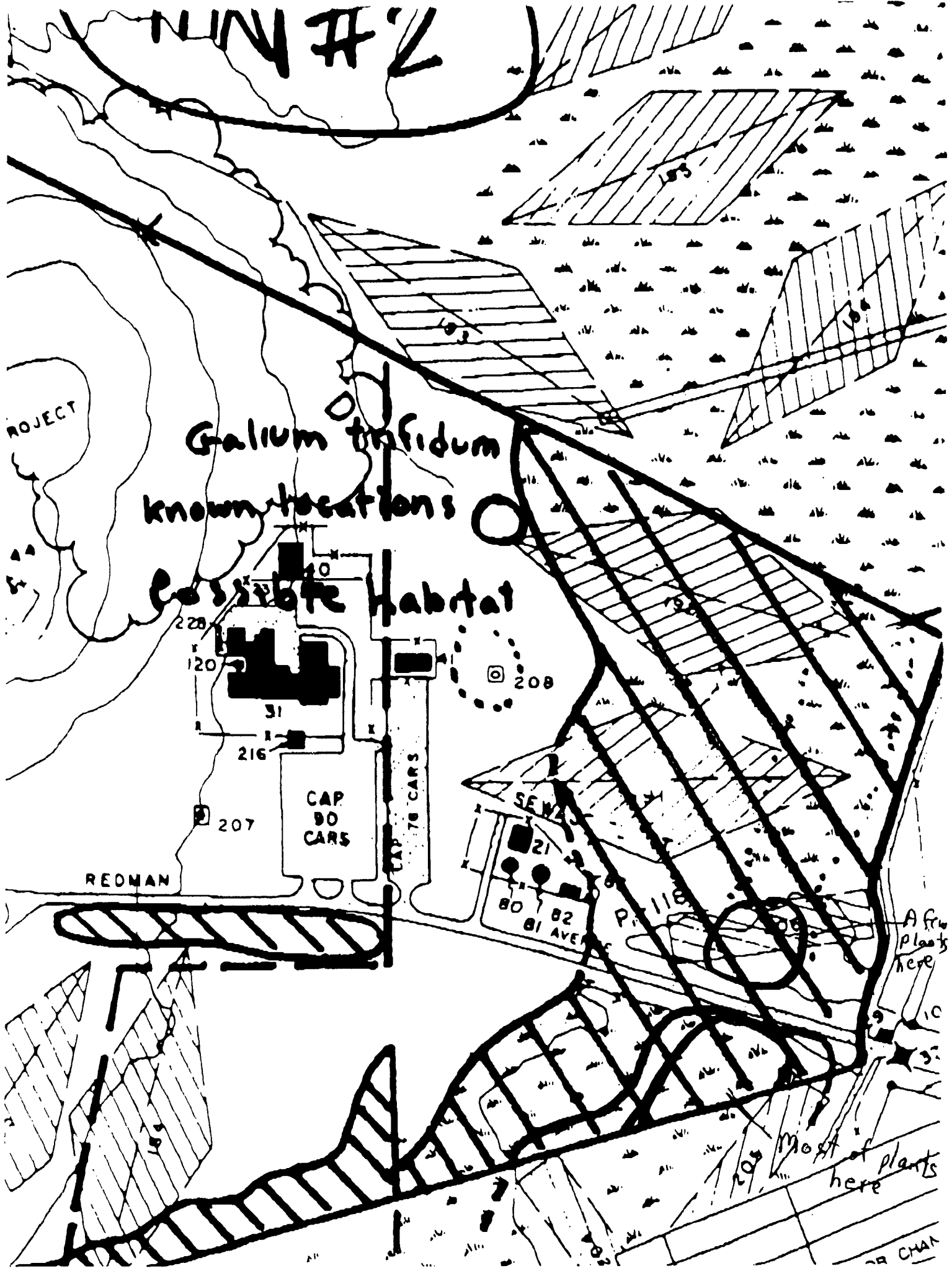
SE 1/4
21
80 82
81 AVE

P 118

A few
plants
here

Most of plants
here

28 CHAR



Site Name Old Naval Reservation - Cheltenham Date: 01-10-15 Source Code: FOI EBE 03
 Quad Name(s): Brandywine Date: _____ Source Code: Janet Ebert
 Quad Code(s): _____ Date: _____ Source Code: _____
 State: MD County(ies): Prince Georges Date: _____ Source Code: _____
 Field Quad Margin #: _____ Date: _____ Source Code: _____
 Full extent of EO known and mapped? ☐ yes ☐ no
 Precise locations of individuals or groups mapped on base map? ☐ yes ☐ no

BIOLOGY

Element Name: Galium trifidum L. Element Code: _____ Occ. #: _____

Phenology	Population Size		Population Area	Age Structure	Vigor
	Ramets	Genets			
% In Leaf			1 sq meter	% Seedlings	Very feeble
% In Bud	actual #		1-5 sq. meter	% Immature	Feeble
% In Flower	estimated #		5-10 sq. meter	% 1st year	?? Normal
% Immature Fruit	1-10		1-100 sq. meter	% Mature (established)	Vigorous
% Mature fruit	11-50	X	X 100 sq mtr-1 hect.	% Senescent	Exceptionally vigorous
% Seed dispersing	51-100		1 hectare +	X Age structure unknown	
% Dormant	101-1000		actual area (if known)		
	1001-10,000				
	10K+				

Comments on above: Probably at least 20 plants, most long past flowering, with new vegetative shoots

Evidence of reproduction? ☒ yes ☐ no Explain: A few late fruits

Type of reproduction: ☒ sexual ☐ asexual ☐ both

Any symbiotic or parasitic relationships? ☐ yes ☒ no Explain: _____

Evidence of disease, predation, or injury? ☐ yes ☒ no Explain: _____

Success at Each Stage of Life Cycle

	good	fair	poor	none	uncertain
reproduction					X
dispersal					X
establishment					X
maintenance					X

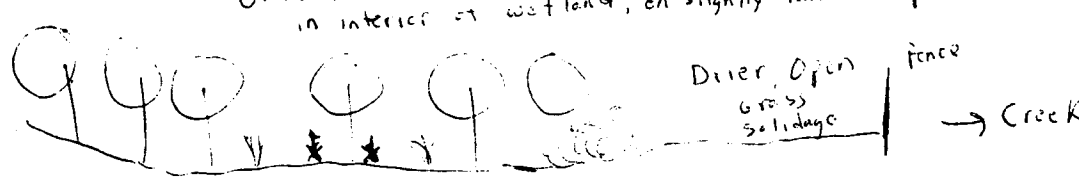
Comments: _____

HABITAT

Aspect	Slope	Light	Topographic position	Moisture
N NE	X 0-3 %	Open	Crest	Inundated (Hydric)
E NW	3-8 %	Partial	Upper Slope	X Saturated (Wet-Mesic)
S SE	8-15 %	X Filtered	Mid-Slope	Moist (Mesic)
W SW	15-35 %	Shaded	Lower Slope	Dry-Mesic
X Flat	35% - Vertical		X Bottom	Dry (Xeric)

Elevation: ~150' ft to _____ ft

Cross section of topography (habitat) / Include scale, direction, element position

← N
 young - thicket - sweet gum woods
 G. trifidum scattered in more open areas
 in interior of wetland, on slightly raised mounds

 Drier, Open
 Gross Solidage
 fence
 Creek
 Wetland at back edge of floodplain

Associated natural community/plant community: Wet young maple-sweetgum woods - fairly open under
 Natural community form completed? yes no
 Associated plant species Acer rubrum, Liquidambar styraciflua, Alnus serrulata
Quercus palustris, Cinna arundinacea, Scirpus cyperinus, Panicum dicotemum,
Aster lateriflorus, Onoclea sensibilis, Juncus spp, Scutellaria lateriflora
Carex spp.
 Soil name(s)/Substrate: _____
 Estimated # of hectares of potential habitat in the immediate area: ?

IDENTIFICATION

Potograph taken? yes X no
 Specimen taken? X yes no If yes, give collector, collection # and repository: Surveyor has very poor specimen

Do other members of this genus co-occur at this site? X yes no If yes, complet below:

List: Possible G. tinctorium

Hybridization? yes no

Identification problems? X yes no

Explain: Could only find a few late-season inflorescences mostly second effort vegetative stems.
ID based on consistently 4 uniform, longer, narrower leaves.
Pedicels somewhat scabrous, fruits small

CONSERVATION

Owner aware of EO? X yes no Unknown Owner protecting EO? yes no ? Unknown

Evidence of disturbance: No recent

Threats to EO: Change in hydrology

Conservation/management needs: Keep floodplain wetland intact.

Areas upstream and downstream already preserved ??

Research needs: _____

Data security? yes no Explain: _____

SUMMARY

EO Quality: (i.e., How representative is this occurrence? Consider the size and productivity of the population and the vitality and vigor of the individuals.)

A- Excellent B- Good C- Marginal D- Poor

Comments: ?

EO Condition: (i.e., is the habitat supporting the EO pristine or degraded? Is there a potential for the habitat to recover from disturbances?)

A- Excellent B- Good C- Marginal D- Poor

Comments: _____

EO Viability: (i.e., what are the long-term prospects for continued existence of this occurrence at the indicated level of quality?)

A- Excellent B- Good C- Marginal D- Poor

Comments: Good if whole wetland is preserved

EO Defensibility: (i.e., can this occurrence be protected from intrinsic human factors?)

A- Excellent B- Good C- Marginal D- Poor

Comments: _____

EO Rank: (i.e., a summary of all factors listed above)

A

B

C

D

Comments: Nice habitat, vulnerable